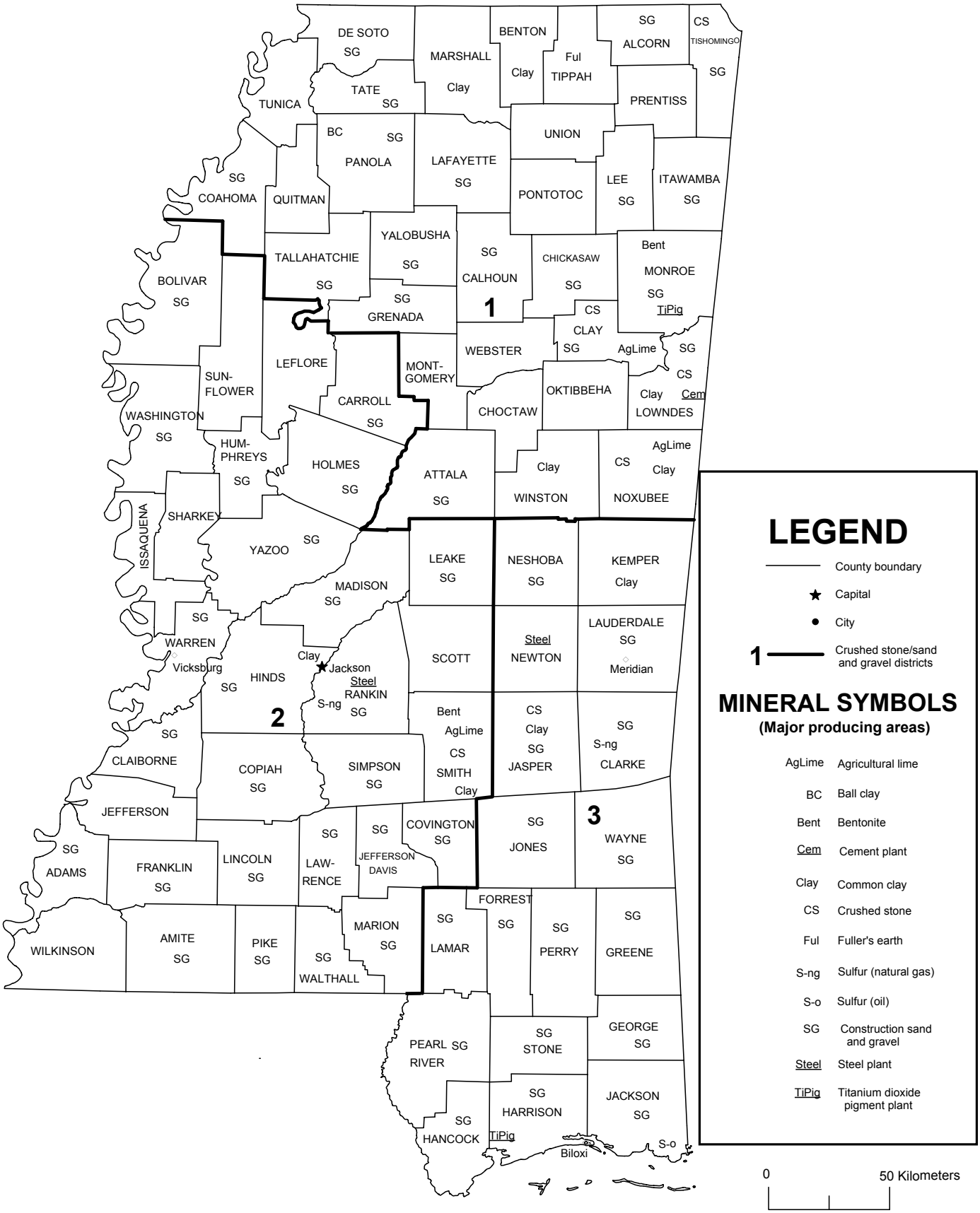
MISSISSIPPI



Source: Mississippi Department of Environmental Quality, Office of Geology/U.S. Geological Survey (2002)

THE MINERAL INDUSTRY OF MISSISSIPPI

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Mississippi Department of Environmental Quality, Office of Geology, for collecting information on all nonfuel minerals.

In 2002, the estimated value[1] of nonfuel mineral production for Mississippi was $176 million, based upon preliminary U.S. Geological Survey (USGS) data. This was a marginal decrease from that of 2001[2] and followed a 4.7% increase in 2001 from that of 2000.

Construction sand and gravel was Mississippi's leading nonfuel mineral, accounting for about 44% of the State's total nonfuel mineral value in 2002. It was followed by fuller's earth, portland cement, crushed stone, and industrial sand and gravel. The State's major construction materials—construction sand and gravel, portland cement, and crushed stone (including crushed marl) (descending order of change)—accounted for more than 70% of Mississippi's total value. In 2002, the nonfuel mineral with the largest increase was construction sand and gravel, up nearly $8 million; bentonite, cement, and common clays also had relatively small increases. These increases were diminished by decreases in industrial sand and gravel, fuller's earth, and crushed stone, resulting in the slight net decrease for the year. In 2001, increases in construction sand and gravel, up more than $9 million, fuller's earth, up $2 million, plus smaller increases in portland cement and industrial sand and gravel more than offset decreases in crushed stone, bentonite, ball clay, and common clays, resulting in an increase in the State's nonfuel mineral total from that of 2000 (table 1).

Based upon USGS estimates of the quantities of minerals produced in the 50 States during 2002, Mississippi remained third in bentonite and fourth of four ball clay-producing States. While the State decreased to fourth from second in the production of fuller's earth, it continued as a significant producer of construction sand and gravel and common clays. Metals produced in Mississippi, especially raw steel, were processed from materials received from other domestic and foreign sources.

The following narrative information was provided by the Mississippi Department of Environmental Quality's (DEQ) Office of Geology[3] (MOG). In 2002, the Mississippi Commission on Environmental Quality (CEQ) and its successor to the permit granting process, the Mississippi Environmental Quality Permit Board (QPB), in total issued 60 surface mining permits covering approximately 485 hectares (ha) (about 1,200 acres) and processed 167 Notices of Exempt Operations [1.6 ha (4 acres) or less] covering approximately 265 ha. Under State law, surface mines of 1.6 ha or less were required neither to obtain a mining permit nor to perform reclamation of any kind. The MOG's Mining and Reclamation Division (MRD) performed 663 annual inspections for all active mining permits on file and received applications for bond release on 118 permits. During the year, 317 ha were reclaimed and released.

Legislation and Government Activities

The Mining and Reclamation Law, originally enacted in 1978, was amended by the 2002 meeting of the Mississippi State Legislature and went into effect July 1, 2002. This amendment strengthened the DEQ's ability to stop illegal mining by enacting stiff penalties for mining without a permit. Among other changes made, the new law moved permit approval to the QPB to make it more consistent with how other agency permits were approved. Previously, all mining permits were issued by the CEQ. The public notice period was shortened from 30 days to 15 days in order to expedite permit approval.

The U.S. Department of Labor's Mine Safety and Health Administration (MSHA) by regulation (Parts 46 and 48) required annual miner safety training. In part, all operations that process material in some way, such as mining, rock crushing, or washing operations, were required to have detailed safety plans in place at mines or mineral-processing sites, and all personnel were required to train in the execution of such plans. The MRD employed a contractor to perform the training and helped to oversee that training throughout the entire State. This trainer was paid in part by a grant from MSHA.

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[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2002 USGS mineral production data published in this chapter are preliminary estimates as of July 2003 and are expected to change. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Specialist contact information may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals/contacts/comdir.html; alternatively, specialists' names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

[2]Values, percentage calculations, and rankings for 2001 may differ from the Minerals Yearbook, Area Reports: Domestic 2001, Volume II, owing to the revision of preliminary 2001 to final 2001 data. Data for 2002 are preliminary and are expected to change; related rankings may also change.

[3]Kenneth McCarley, Director of the Mining and Reclamation Division of the Mississippi Department of Environmental Quality's Office of Geology, authored the text of the State mineral industry information provided by that agency.

TABLE 1

NONFUEL RAW MINERAL PRODUCTION IN MISSISSIPPI[1, 2]

(Thousand metric tons and thousand dollars)

Mineral	2000		2001		2002[p]	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays:						
Bentonite	W	W	155 [e]	4,900 [e]	W	W
Common	484	2,200	461	2,040	523	2,330
Fuller's earth	371	30,100	385	32,100	367	31,200
Gemstones	NA	1	NA	1	NA	1
Sand and gravel, construction	11,700	60,900	13,700	70,100	14,900	77,900
Stone, crushed	2,530 [3]	23,700 [3]	2,140 [3]	21,500 [3]	2,000	21,000
Combined values of cement (portland), clays (ball), sand and gravel (industrial), stone [crushed marl (2000-2001)], and values indicated by symbol W	XX	51,700	XX	46,300	XX	44,000
Total	XX	169,000 [r]	XX	177,000	XX	176,000

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined values" data. XX Not applicable.

[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

[2]Data are rounded to no more than three significant digits; may not add to totals shown.

[3]Excludes certain stones; kind and value included with "Combined values" data.

TABLE 2

MISSISSIPPI: CRUSHED STONE SOLD OR USED, BY KIND[1]

Kind	2000				2001			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	4 [r]	2,530	$23,700	$9.37	2	2,140	$21,500	$10.07
Calcareous marl	1	W	W	7.87	1	W	W	7.98
Total or average	XX	2,530	23,700	9.37	XX	2,140	21,500	10.07

[r]Revised. W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

TABLE 3

MISSISSIPPI: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2001, BY USE[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch), other coarse aggregates	W	W	$18.79
Coarse aggregate, graded, other graded coarse aggregates	W	W	16.05
Fine aggregate (-3/8 inch), other fine aggegates	W	W	13.37
Coarse and fine aggregate:			
Graded road base or subbase	W	W	7.98
Other coarse and fine aggregates	W	W	15.07
Agricultural:			
Limestone	W	W	15.33
Other coarse and fine aggregates	W	W	7.98
Chemical and metallurgical, cement manufacture	W	W	3.97
Unspecified:[2]			
Reported	630	$5,730	9.10
Estimated	16	150	9.13
Total or average	2,140	21,500	10.07

W Withheld to avoid disclosing company proprietary data; included in "Total."

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

[2]Reported and estimated production without a breakdown by end use.

TABLE 4

MISSISSIPPI: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2001, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1 1/2 inch)[2]	W	W	W	W	W	W
Coarse aggregate, graded[3]	W	W	W	W	W	W
Fine aggregate (-3/8 inch)[4]	W	W	W	W	W	W
Coarse and fine aggregate[5]	W	W	W	W	W	W
Agricultural[6]	--	--	--	--	--	--
Chemical and metallurgical[7]	W	W	--	--	--	--
Unspecified:[8]						
Reported	14	125	374	3,420	242	2,190
Estimated	16	150	--	--	--	--
Total	30	271	374	3,420	242	2,190

	Unspecified districts	
	Quantity	Value
Construction:		
Coarse aggregate (+1 1/2 inch)[2]	W	W
Coarse aggregate, graded[3]	W	W
Fine aggregate (-3/8 inch)[4]	--	--
Coarse and fine aggregate[5]	W	W
Agricultural[6]	W	W
Chemical and metallurgical[7]	--	--
Unspecified:[8]		
Reported	--	--
Estimated	--	--
Total	140	1,970

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes other coarse aggregates.

[3]Includes other graded coarse aggregates.

[4]Includes other fine aggregates.

[5]Includes graded road base or subbase and other coarse and fine aggregates.

[6]Includes agricultural limestone and other agricultural uses.

[7]Includes cement manufacture.

[8]Reported and estimated production without a breakdown by end use.

TABLE 5

MISSISSIPPI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2001, BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	3,270	$18,200	$5.57
Concrete products (blocks, bricks, pipe, decorative, etc.)[2]	100	659	6.59
Asphaltic concrete aggregates and other bituminous mixtures	1,750	9,460	5.41
Road base and coverings	2,020	8,430	4.17
Fill	283	641	2.27
Unspecified:[3]			
Reported	1,570	8,790	5.60
Estimated	4,700	24,000	5.12
Total or average	13,700	70,100	5.13

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

[2]Includes plaster and gunite sands.

[3]Reported and estimated production without a breakdown by end use.

TABLE 6

MISSISSIPPI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2001, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products[2]	2,410	12,700	W	W	W	W	117	700
Asphaltic concrete aggregates and road base materials	2,820	13,300	W	W	W	W	143	414
Other miscellaneous uses[3]	225	559	1,590	9,380	103	310	12	15
Unspecified:[4]								
Reported	1,070	4,770	490	4,010	9	15	--	--
Estimated	940	4,900	2,000	9,900	1,800	9,100	--	--
Total	7,460	36,200	4,060	23,300	1,870	9,420	272	1,130

W Withheld to avoid disclosing company proprietary data; included with "Other miscellaneous uses." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes plaster and gunite sands.

[3]Includes fill.

[4]Reported and estimated production without a breakdown by end use.